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ABSTRACT

This paper identifies some of the major obstacles to the integration of university qualifications into New Zealand's National Qualifications Framework. Currently, New Zealand's universities are under pressure to integrate their qualifications into the Framework which employs a method of unit design that is generally more suited to trade and technical training than the general and professional education programs typically offered at universities. The paper examines problems that would arise if the Framework method of defining unit standards were applied to the design of university programs and papers. Several pedagogical problems are identified along with philosophical differences between the New Zealand Qualifications Authority (NZQA) and the universities over matters such as the nature and structure of knowledge, credit transfer, the recognition of prior learning, the transfer of generic skills, and the primacy given by the NZQA to unit standards rather than to total qualification. Instead of universities following the unit standard model of development, an extended framework structure is suggested which emphasizes the total qualification. Such a structure is likely to allow for a more productive relationship to develop between the NZQA and universities. (Contains 21 references.) (JB)

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Cedric Hall

ABSTRACT

The purpose of this paper is to identify some of the major obstacles to the integration of university qualifications into the National Qualifications Framework. The paper examines problems that would arise if the Framework method of defining unit standards were applied to the design of university programmes and papers. Several pedagogical problems are identified along with philosophical differences between NZQA and the universities over matters such as the nature and structure of knowledge, credit transfer, the recognition of prior learning, the transfer of generic skills, and the primacy given by the NZQA to unit standards rather than the total qualification. Instead of universities following the unit standard model of development, an extended framework structure is suggested here which emphasises the total qualification. Such a structure is likely to allow for a more productive relationship to develop between the NZQA and universities.

Obstacles to the Integration of University Qualifications and Courses into the National Qualifications Framework

Cedric Hall
(Victoria University of Wellington)

Introduction

Under the present climate of accountability, New Zealand universities are being required to look very closely at their procedures for ensuring the quality of their academic activities. Course and programme design, teaching, assessment and research productivity are all coming under increasing scrutiny. The decision of the New Zealand Vice-Chancellors' Committee (NZVCC) to establish an academic audit unit is an example of the response of universities to the current climate. Within universities a number of well developed quality assurance systems already exist, including departmental reviews, the use of external examiners, probationary procedures for new lecturers, and appraisal mechanisms covering the evaluation of teaching, annual reporting, promotion and the professional development of staff.

From the perspective of this paper, the procedures used by universities for designing and monitoring individual courses or papers (units of study) are of particular significance. At the present time universities are under pressure to integrate their qualifications into the National Qualifications Framework which employs a method of unit design that is generally more suited to trade and technical training than the general and professional educational programmes that are typically offered within universities. This paper examines some of the problems that would arise if the Framework method of defining unit standards were applied to the design of individual university papers. In particular, the arguments are made (i) that the specification of 'elements' (objectives) should not be separated from the course design process, (ii) that the elements (objectives) of a paper should not be part of the unit registration, and (iii) that performance criteria should be associated with the particular assessment tasks undertaken by students rather than individually with each element or objective. These issues have fundamental pedagogical implications.

This paper also draws attention to other obstacles which limit the applicability of the Framework to university education. These include: the primacy given by the New Zealand Qualifications Authority (NZQA) to unit standards rather than the total qualification; the different outlooks of the universities and NZQA on credit transfer, the recognition of prior learning and the transfer of generic skills and competencies; the scope and

structure of the Framework; and the capacity of the NZQA to operate a Framework which incorporates both vocational and university qualifications. On the latter point, an extended structure is suggested here which would allow for a more productive relationship to develop between the NZQA and universities.

Terminology

The literature on assessment and course design is typified by confusion in the use of terminology. 'Course', for example, is often used simultaneously to refer to a complete programme of study (e.g. a degree) and an individual paper within a programme. What used to be called an 'objective' is now more often referred to as a 'learning outcome' or, in the case of the National Qualifications Framework, an 'element' of learning; sometimes these terms are used inter-changeably while in other contexts they are used to describe different variations or formats that an objective might take.

The definitions that are given below are intended to ensure that for this paper there is a common understanding. No attempt is being made to force different groups, institutions or bodies into adopting a standard language, although clearly benefits would arise if this actually happened.

> *Programme:* The combination of core and optional courses, papers, units or modules, which a student must pass in order to obtain a degree, diploma or other qualification. A programme includes the rules that students must comply with to satisfy achievement of the qualification concerned (e.g. number of credits to be achieved and the requirements for majoring in a subject).
>
> *Course, paper, module or unit:* An individual unit of study within a programme for which credit or points are awarded as contribution towards the award of a qualification.
>
> *Objective:* A succinct statement of intent which identifies either a desired outcome to be achieved from a particular action or a desired process which should be undertaken or experienced. This definition allows for both outcome and process objectives. The terms *learning outcome* and *element* (as used by the NZQA) are examples of the first.

The National Qualifications Framework

The Education Amendment Act (1990) established the New Zealand Qualifications Authority (NZQA) with responsibilities for creating and

operating a framework linking secondary, technical, professional and other higher education qualifications. The functions of the NZQA include:

> "To oversee the setting of standards for qualifications in secondary schools and in post-secondary education and training:" (Para 253 (1)(a))
>
> "To develop a framework for national qualifications in secondary schools and in post-secondary education and training in which–
> (i) All qualifications ... have a purpose and a relationship to each other that students and the public can understand; and
> (ii) There is a flexible system for the gaining of qualifications, with recognition of competency already achieved:" (Para 253 (1)(c))

In pursuance of these functions, the NZQA has established an eight level Framework which sequences the different qualifications that are nationally recognised through secondary and post-secondary education. Figure 1 shows the basic pattern.[1]

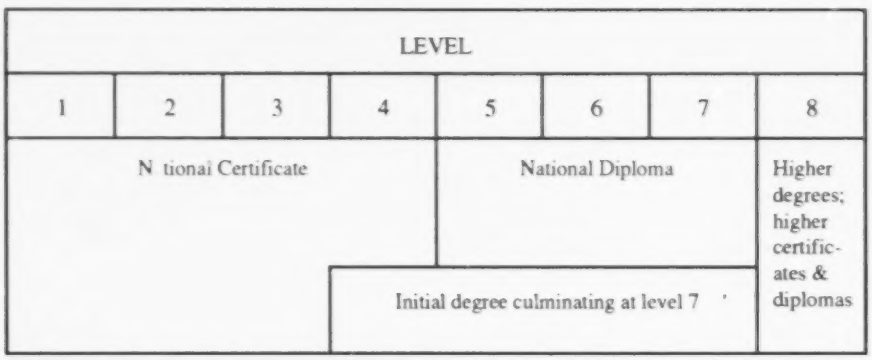

Figure 1: Levels of the New Zealand Qualifications Framework

The NZQA identifies the building blocks of the Framework as 'unit standards' (see below) which are assigned to the Framework according to their level. In turn, qualifications consist of tailored packages of units or papers developed by providers (educational establishments and/or employers) to incorporate the set of unit standards considered appropriate to the profession, industry or field of study in question. Note that an individual paper can combine several unit standards and/or cover additional material not directly related to the unit standard(s) under study.

The placement of unit standards within the Framework is intended to promote ease of movement of students between programmes and learning establishments. The development of systems for credit transfer and recognition of prior learning are therefore fundamental to the operation of the Framework; this work is currently underway in consultation with the various professional and educational groups.

The NZQA does not itself develop curricula although it works with national advisory groups to develop unit standards. Its role is to establish

policies and criteria for approving the inclusion of programmes and units in the Framework; the NZQA is required to do this in consultation with the relevant groups (the Ministry, NZVCC, Industry Training Organisations, National Standards Bodies and other parties). The NZQA also has the role of establishing policies and criteria for accrediting institutions and private training establishments to provide courses of study and training; again it must consult in this process.

NZQA Unit Standards

A unit standard identifies a set of 'elements' (outcome objectives) which students/trainees are expected to achieve in relation to specified performance criteria. Unit standards are required to be registered with the Framework and comprise the information shown in Figure 2.

Domain:	Broad area to which the unit standard relates (e.g. *Shorthand*);
Title:	Title of unit standard (e.g. *Write and transcribe shorthand – 60 words per minute*);
Data:	Level, credit rating, final date for comment, expiry date;
Sub-field:	Sub-field of the domain to which the unit standard relates (e.g. *Office Systems*);
Purpose statement:	A brief explanation of the purpose of the unit;
Entry information:	Prerequisites – the educational and other requirements for entry;
Accreditation option:	Method of accreditation (e.g. evaluation of documentation by NZQA);
Moderation option:	Description of procedures for moderation;
Special notes:	Information which helps contextualise the unit standard;
Elements:	The skills and knowledge to be acquired;
Performance criteria:	The standards against which performance on each element will be measured;
Range:	Information which clarifies the application of performance criteria (e.g. the equipment and material that should be used, the environmental conditions which should apply, etc.).

Figure 2: Information specified in a Unit Standard for the Framework[2]

Unit standards are developed either by National Standards Bodies or Industry Training Organisations and are based on a thorough training needs analysis of the skills, attitudes, competencies and knowledge that are considered fundamental to the industries or professions concerned. The unit delivery, including the course design, is generally carried out by employers and/or educational institutions (called the 'providers'). The unit delivery is expected to conform with requirements for accreditation which include, for example, the development of a system for the

evaluation of teaching, clear evidence of the availability of the necessary financial, administrative and physical resources to support delivery, and assessment procedures which are fair, valid and consistent.[3]

Under this model, the elements and performance criteria given in the unit standard act like coat pegs on which providers are required to hang their content, teaching and assessment procedures. The integration of the two stages – the development of unit standards and unit delivery – is critical for achieving a coherent programme of training. This will be discussed shortly.

NZVCC programme approval requirements

Under the Education Amendment Act 1990, the NZVCC is assigned the responsibility, which it already held, for the approval of university courses and programmes. The NZVCC released a booklet in 1993 outlining its procedures which are built on five criteria developed jointly by the NZQA and NZVCC. The criteria comprise:[4]

- The acceptability of the proposed course [programme]* to the relevant academic, professional and other communities in terms of its stated objectives, nomenclature, content and structure.
- The adequacy and appropriateness of the regulations that specify requirements for admission, credit for previous study, recognition of prior learning, course [programme] structure, assessment procedures and the normal progression.
- The availability of appropriate academic staffing, teaching and research facilities, and support services.
- The adequacy of the means of ensuring that assessment and appeals procedures are appropriate, given the stated objectives, and fair.
- The adequacy of the provisions for monitoring course [programme] standards and quality, for reviewing course [programme] regulations and content, and for determining whether the course [programme] shall continue to be offered.

(*Inserted by the writer; see Terminology earlier.)

To a large extent the criteria ratify most of the procedures that the NZVCC Committee on University Academic Programmes (CUAP) have applied for some time. However it should be recognised that before CUAP consider the approval of a new programme a lengthy and detailed scrutiny within and between universities will have taken place.

In respect of individual courses or papers, initial approval requirements focus on the following items:

Domain (the programme(s) or qualification(s) to which the course belongs);
Title and code;
Data (level, credit rating, etc.);
Purpose statement (calendar description);
Entry information (prerequisites, co-requisites, exclusions).

These cannot be altered without re-approval although this does not normally require further consideration by CUAP (i.e. it is done within institutions).

The responsibility for specifying objectives and performance criteria lies with departments and teaching staff. It should be noted that the extent to which this information (objectives and performance criteria) is made explicit to students varies across courses. This variability is under scrutiny in some universities as they review their quality systems in preparation for academic audit in 1994 and beyond.

Departments and teaching staff also have the responsibility for developing the delivery of university courses under guidelines which comply with both CUAP and local university requirements. Under this system, the specification of objectives and performance criteria are part of the 'unit delivery', not the initial registration.

The notion of coherence

Before identifying some of the problems that would arise if the universities followed too closely the NZQA system, two concepts underpinning course design should be mentioned. The following extract from Hall (1992) introduces these concepts:[5]

> Coherence can be viewed at two levels: the way an individual course complements other courses in providing a meaningful programme – I call this external coherence; and the way a course hangs together internally (internal coherence) by linking the content, presentation and assessment framework of a course with the learning outcomes.

The concepts of internal and external course coherence are fundamental to the design of programmes and the papers that contribute to them. As indicated, the objectives for a course or paper should be closely linked to the content, assessment and delivery; what is taught, whether directly in the classroom, at work, in the field or through independent study, must form the basis for assessment. Similarly, the qualities looked for in student work (i.e. what is assessed) should clearly relate to the objectives of the course. The design and delivery of a course should be directed to keeping these 'internal' components – objectives, content, assessment and delivery – unified.

By the same token, course designers should ensure that the content and objectives of a course fit with other courses which contribute to the same programme. This entails that the objectives and graduate profile for a programme be borne in mind when individual courses are being designed. Similarly, the pre-requisite and co-requisite links between different courses should be addressed.

However, achieving internal and external coherence is not simply about subject matter. Teachers in the same course, and teachers in different courses in the same programme, must interact and communicate to ensure that both forms of coherence are achieved. Similarly, attention needs to be paid to the needs and ambitions of students, including their background and entry skills, so that the courses they undertake make sense as a personal programme of study for them; effective systems for student advising and monitoring student progress are of major importance for achieving both forms of coherence.

Problems and misconceptions concerning Unit Standards

1. The integration of objectives and performance criteria with the development of the content, assessment and delivery of a course.

As indicated earlier, under the Framework method of course development, unit standards are developed by Industry Training Organisations or National Standards Bodies from a thorough analysis of the training and educational needs of employees in the industries and professions concerned. The unit delivery is then developed by the provider to meet the unit standards. In effect this creates a two stage process which, from the perspective of internal course coherence, could well create problems for providers. A critical pedagogical issue is the extent to which the two stages are co-ordinated and **iterative**. If in the process of course development, flaws or improvements in the initial unit standards are identified, opportunity must exist for further shaping of these standards. The development of the two – unit standards and unit delivery – should be closely integrated.

In a university context, the recommended approach to course design is first to identify the major components of a course (knowledge, skills and values) and then draft a related set of objectives. In drafting the objectives, a university teacher will need to consider not only the content of the course but also the students' background, the objectives of the programme to which the course relates, any broader considerations (e.g. the graduate profile for the qualification and the university's charter), and the constraints under which the teacher and students will operate. Course development proceeds as an iterative process. The initial objectives may be modified several times as the teacher progressively integrates the assessment, content, type of delivery, availability of resources, student

background, and so on into a coherent whole. It would be unusual for the inital objectives to be identical to the ones that are finally adopted. Furthermore, many academics develop procedures for allowing students to negotiate specific objectives of relevance to their personal study. This is especially important in open learning contexts where students are given, to a greater or lesser extent, choice in selecting topics or assignments that are relevant to their own situation – academic, cultural and professional.

The view argued here is that the objectives for a course should be seen as 'hypotheses' for giving focus to student learning, that is, initial directions which are subject to verification or change. In some subjects, objectives may become relatively stable within a short period, although eventually course developments, new material, changes in direction and so on, will lead to modifications or substantial revisions. In other courses, the rapid change in knowledge and the wide variations in focus that a teacher may take, will result in frequent revision of objectives. Permanency is not an expected characteristic of the objectives of most university courses. It is hard to see, therefore, how the elements in a unit standard, which have not had the benefit of being tested through the process of course design, can be seen as valid and stable standards against which to judge student performance.

In comparing university and vocational education, several important differences must be borne in mind before any thought can be given to applying the NZQA unit standard approach to university education. First, the training needs analysis methodology that is applied to work-related contexts has little applicability to the majority of university courses because of their strong general and theoretical base; content analysis in such courses takes a variety of forms depending on the subject. Second, the heavy involvement of industry and professional groups in defining the objectives of vocational education is much less desirable for university programmes (this, of course, depends on the nature of the programme, i.e. its balance between general and professional education). While universities must have systems for involving such groups – and this is required and done when a new qualification is introduced – universities draw principally upon the research and expertise of their staff to identify and elaborate the content and objectives of their subjects. Third, unlike the specification of unit standards for the Framework, university programmes are not designed to meet a single set of national standards in a subject or its sub-fields. For example, the psychology specialities taught at Massey University will not necessarily be the same (i.e. have the same content and objectives) as those taught at Auckland or Otago. Professional and vocational training, on the other hand, may legitimately require that the skills of employees in different parts of the country meet common objectives and performance criteria. Fourth, recognition needs to be given to the long established framework of university qualifications that enable New Zealand graduates to gain international acceptance for their qualifications. Universities will not compromise their international status

by following a method of course design and unit registration which risks weakening the pedagogical basis of what is offered.

Some of this is a digression from the original point, namely, that the development of the objectives and performance criteria of a course should be fully integrated with the content, teaching and assessment. The argument here is not that the NZQA model is ineffective for achieving this in certain vocational contexts (this is for the users of the Framework to decide) but rather that a different philosophy and approach to course design is appropriate for most university education. University education should not be constrained by a model of development which is better suited to other contexts.

2. Registration of elements

Whereas elements (outcome objectives) are required to be registered for the NZQA Framework, they are not part of the approval requirements for individual university courses. The view presented here is that each course should identify the expectations held of students – and this seems most appropriately done through a statement of objectives – but that these expectations remain part of the course delivery (and specified in the course outline) rather than form part of the registration requirements.

As argued above, permanency is not a characteristic of the objectives for most university courses. A teacher may alter the objectives from one year to the next in order to take account of different emphases, previous course evaluations or recent developments in the subject. Similarly, a new teacher may want to redirect the focus of the course in line with the particular strengths he or she brings. The present system recognises that what is taught and what is emphasised (e.g. through the objectives) is to some extent arbitrary; two teachers are unlikely to set exactly the same objectives although some overlap might be expected. However, if objectives are registered in the way required for elements in the Framework, 'central' approval would be needed before a change can be introduced; this could result in considerable delay (e.g. 12 months or longer) during which time a new teacher would be bound by objectives which were not flexible enough to allow a different approach to be taken to the teaching or assessment in a course, or new knowledge or developments in a field to be included.

A more productive and flexible approach is to allow teachers to change the objectives of a course before delivery but require that they justify such change (in terms of internal and external coherence) through a departmental monitoring procedure. Quality assurance rules must also exist for ensuring that the objectives are not changed mid-course without prior consultation with students and clearance from a departmental (or comparable) monitoring committee. Similarly, appropriate guidance and

support should be given to students in situations where they are expected to contribute objectives of their own, as is commonly the case in most post-graduate teaching and research programmes.

3. Associating performance criteria with objectives

Under the NZQA approach, performance criteria are associated with each element in a unit standard. The comparable approach in university education would be to require that performance criteria be written for each course objective and registered with CUAP. It follows from the preceding that if the objectives of a course are open to alteration from year to year, then the performance criteria should be similarly free to vary. However, another potential problem exists if the NZQA approach to unit registration is followed. If assessment criteria are associated with each objective, encouragement then exists for assessing each objective in isolation; a checklist mentality can evolve. Yet most academics (and indeed practitioners) would argue that learning and teaching should be directed towards both the acquisition and *integration* of knowledge, skills and values. This suggests that assessment criteria should be associated with the tasks that students undertake (exams, essays, reports, projects, etc.) and that these tasks should be structured so that the different learning objectives can be sensibly related through intellectual processes such as composition, argument, design, problem-solving and research.

Note that the argument here is not about whether performance criteria should be stated but rather at what point in the process these criteria should be made explicit to students. Pedagogically, it makes most sense to relate the criteria to the tasks students are set – this is where the criteria are likely to be most clearly understood and taken account of by students.

In defence of the NZQA, it should be stated that their advisers discourage providers from developing a checklist approach to assessment in contexts which call for an integrated approach. Perhaps, however, this highlights the artificality of trying to specify performance criteria too early in the course design process.

Unfortunately, improvements still need to be made by some university teachers in the way they inform students of what is expected of them, both in respect of making clear the course objectives that have to be met and explaining the criteria by which student work will be assessed. Some students still find out what is expected of them after their work has been returned; this is too late. The criteria for judging the quality of students' work should be stated up front with the task, that is, before the work is tackled. This enables the students to focus more clearly on the requirements of the task and to self-assess the quality of their own work before it is handed in. An increasing number of lecturers at Victoria University of Wellington (VUW) are now giving out assessment criteria

with their assignments and student reaction to this practice is very positive. Some lecturers are also asking students to assess their own work against these criteria as part of the learning associated with the task; the self-assessments are not intended for entry into the markbook but for promoting independence and responsibility through awareness of one's own strengths and weaknesses.

4. The inflexibility and primacy of unit standards

The preceding arguments have focused on the pedagogical limitations of registering objectives (elements) and associating performance criteria with each objective in turn. Another way of viewing the problem is to imagine the deliberations of a group of experts who have been given the task of specifying unit standards for a field of study in higher education. Lets take the study of *human development* as an example and consider two questions.

First, would we expect the same unit standards to be defined by experts in nursing education and experts in teacher education (both groups having an obvious interest in the study of human development)? The answer is clearly no. While the two groups may cover overlapping content in their programmes, they would not treat the material in the same way or give the same emphasis to particular knowledge, skills and values. Their respective professions have different reasons for teaching the subject and therefore would want to define the content and standards of their subject in different ways.

Secondly, would we expect two groups of experts in the same profession (e.g. teacher education) to define the unit standards in the same way? Again the answer is no. The knowledge base for human development (as is the case for any knowledge base) is capable of being analysed and structured in a wide variety of ways. For example, a chronological approach could be taken which might focus on prenatal development, then infancy, then early childhood, etc. Alternatively, a themes approach could be followed, focusing on cognitive development, gender identity, socialisation, and so on. The approach followed would influence directly the composition of the unit standards and, in turn, place considerable constraints on the approach to course development and delivery that different providers might otherwise want to follow. **A particular set of unit standards is but <u>one</u> way of organising the structure of a subject.**

Of particular interest in this respect is a 'note' appended to the terms of reference of the Tertiary Lead Group (a group which has been established to advise the Minister on the implementation of the Framework). The claim is made that:

> The design of the National Qualifications Framework allows flexible arrangements for any knowledge based areas of education.

That NZQA should make such a claim suggests either that it has little understanding of the nature of knowledge (which seems surprising) or that it simply has not understood the consequences – educational and pedagogical – of the model it is promoting. Whatever the explanation, it is hard to fathom NZQA's apparent uncritical pursuance of the unit standard model.

As indicated earlier, NZQA sees unit standards as the building blocks of the Framework. In effect, it has given primacy (whether intended or not) to the status of the unit standard over the purpose and coherence of a total programme. This is simply not the way universities see education; universities place much greater store on the total qualification – its purpose, composition and overall coherence. The same qualification in different universities may have a different structure, different approaches, and different objectives. Such diversity should not be interpreted as a deficiency – indeed, approval procedures look for the distinctive nature of a programme. If standards are to be defined, they should take as the major focus the overall quality of an educational programme – its broader purpose, its overall objectives, its design, its delivery and the quality of student work. To focus the definition of standards on 'units' rather than on the total programme misses out on the integrative nature of university education. Given that NZQA has developed a comprehensive system of quality assurance for accreditation and approval, it seems strangely counter-productive to undo this good work with a narrow, and pedagogically limiting, focus on unit standard definition.

That NZQA has adopted the unit standard methodology raises a futher question of primacy: has the aim of providing a mechanism for easy transfer within the education system taken precedence over the nature and content of the education that should be provided? Whatever the answer, NZQA should be reminded not to lose sight of the goals and content of higher education as it pursues systems of transfer. Educational purpose and content come first; ease of transfer comes later.

5. The generality-specificity of objectives

In 1992, the VUW Academic Committee invited a staff member from each faculty to apply the NZQA unit standard approach to a course of their own; that is, staff were asked to write objectives and performance criteria as if they were unit standards from which their courses would be designed. Several problems were identified which are dealt with under this and the following sub-headings; some of the problems represent misconceptions of the intent of the NZQA approach to unit development.

All participants in this exercise felt that the NZQA model was more suited to the practical and applied components of their course than the

theoretical aspects. Unfortunately, the model of a unit standard that was given to the participants, an example in horticulture, followed quite closely a behaviourist approach to the specification of objectives and performance criteria (as do all the published unit standards that have been viewed by the writer to date). This promoted an attempt by the participants to over-specify the objectives for their course and to write them in strict behavioural terms. This they found easier to do for the practical and technical aspects of their course than for the theoretical components. Furthermore, they found the identification of performance criteria far easier to specify for laboratory and performance activities than for objectives which required more covert intellectual processes.

The literature on the use of educational objectives is now quite clear that behaviourist systems are inappropriate for most general educational contexts and, indeed, for many professional contexts.[6] This is not to argue that objectives should not be set, but rather that their form should emphasise understanding, argument, analysis, integration and problem-solving rather than focus on highly measureable behaviours such as 'list', 'define', 'state', and 'demonstrate'. General educational objectives should also be capable of dealing with 'process' as well as 'outcome' behaviours; the NZQA expressly rejects process objectives as being appropriate for inclusion in unit standards.

To some extent, however, the issue is about the level of generality-specificity to which objectives should be stated. The tendency to over-specify objectives, which has typified the behaviourist approach to course design, has been strongly criticised as leading to fragmentation rather than integration of knowledge. From a learning perspective, it makes no sense to present students with a huge list of objectives at the outset (e.g. in the course outline), most of which would be meaningless until dealt with during the course. The approach taken in course design workshops at VUW is to encourage academic staff to encapsulate the focus of the course in a relatively small number of statements; in practice, most academics find that they need only 3-7 carefully worded objectives to do this. The unfolding or amplification of objectives is best done at appropriate points in the course or through the performance criteria associated with the tasks that students undertake; this is when students can make most sense out of what is required of them.

The point should be made here that the NZQA does not in fact expect a behaviourist approach to be followed by providers in their design of courses to meet unit standards (although the model hardly encourages other approaches); furthermore, the NZQA is working with advisory groups to contain the tendency of some of them to over-specify their expectations of students. Of interest is a recent NZQA publication which illustrates a standards-based approach to the assessment of English at the University of Otago. This indicates considerable movement from a strict behaviourist model.[7]

However, in drawing attention to the broader intent of the NZQA, a cautionary remark should be made. The writer, in consultation with colleagues in the polytechnic sector, has had the opportunity to view attempts by polytechnic lecturers to design courses which have associated performance criteria directly with the learning outcomes for a course. The general reaction has been one of concern. The problem appears to lie in the superficiality of having to identify such criteria too early in the course design process. The resulting statements too often trivialise what is expected of students, resembling closely 'behaviourist' learning outcomes rather than actual assessment criteria. As already argued, to be of value in setting standards, performance criteria are much better associated with the tasks assigned to students; at the earlier stage, such criteria offer little help to teachers and, indeed, encourage a narrow approach to assessment.

6. Defining excellence

One problem which most of the participants in the VUW exercise highlighted was the failure of the NZQA approach to give sufficient recognition to the importance of 'excellence' (by emphasising instead 'competence') and the difficulty that exists in identifying precise criteria to describe student work of this standard. The argument commonly made is that excellence is far easier to recognise after the event than to define it in advance.

Various writers have dealt with the 'competency' debate in education and I have no intention of covering old ground.[8] The principal point is that different models of competency exist, some of which reinforce a behaviourist approach to assessing professional competency while others focus more on an integrated approach similar to some of the VUW practices referred to earlier.[9] NZQA itself is keen to encourage industry groups and providers to pursue alternative competency models. It should be added that the present NZQA model of defining unit standards does not prevent providers from applying grade standards to their courses.

In relation to the notion of excellence, research conducted at VUW suggests that academic staff conceptions of 'competence' align more with the notion of 'good' or 'satisfactory' performance than 'excellent' or 'outstanding' achievement.[10] This no doubt contributes to university suspicion of the notion of competence. The important point to make here is that competency-based assessment in the form of a 'can do/can't do' decision is inappropriate in most university contexts but where competency incorporates levels of achievement ('excellent', 'good', etc.) then such models should be considered on their merits rather than on predispositions to view them as behaviourist or reductionist.

As an approach to the identification of levels of performance, the NZQA has encouraged course developers to follow a standards-based model of assessment. The University of Otago English experiment falls into this category as does (somewhat loosely) some of the assessment practices being followed at VUW. However, none of the examples viewed by the writer give very explicit statements as to what 'excellent' means in relation to written and oral work, and it is doubtful whether very much more can be expected without tagging such descriptions to highly specific behaviours (which may risk giving students the 'answer' to questions). Again we are in danger of over-specification which could be counter-productive to the aim of challenging students to think beyond the task requirements; going beyond – providing something new or better – is in line with the conception of excellence held by a number of academics at VUW.[11]

The likelihood is that 'excellence' will remain an elusive concept to define but one which will nevertheless be employed in order to classify fairly the high quality of work submitted by some students. The kind of advanced specification given in the Otago English and VUW examples are worthy of pursuing, if only to make clear to students that excellence is attainable and very much part of the ethos of a university education.

7. Expansion of workload in course design

The single biggest concern to the staff who participated in the VUW exercise was the enormity of the task if all university courses were to be redesigned to meet the NZQA approach. While some of this concern can be attributed to the seemingly behaviourist style of the earlier NZQA examples – course design in such a system is a huge undertaking – it is clear that academic staff would not take kindly to redesigning their courses unless major benefits were clearly apparent. At least two points need mentioning.

First, as already argued, the NZQA registration of elements and performance criteria makes less sense pedagogically than the procedures currently followed by universities; objectives are not sufficiently permanent to warrant registration and performance criteria are better given out with assessment tasks. However, universities may need to review their quality control procedures to ensure that all courses give students clear information about what is expected of them.

Second, more emphasis within universities will need to be given to the skills of course design. From a workload perspective, it takes no more time to develop a coherent course than one which is poorly designed; however, time and resources (and encouragement from senior staff) are needed if the course design skills of some university teachers are to be upgraded to raise the quality of what is offered.

8. Maintaining a focus on student learning

Several participants raised concern about the absence of a student face to the NZQA approach to course development. Yet again the apparent behaviourist style of the NZQA registration requirements seems to have unduly influenced this view. However, some consideration should be given to the literature on student learning. While it is clear that students welcome clear information on what is expected of them, it is not sufficient simply to base a programme around a detailed training needs analysis of an industry/profession or, in the case of university education, an analysis of the knowledge base of a subject. Those involved in the design and delivery of a course must have a strong empathy for their students – who they are, their educational, social and cultural backgrounds, any work skills they bring to the course, their deficiencies or gaps in learning, their particular objectives for studying a course, and the hurdles that they will need to overcome. This requires that those responsible for the design of a course should consider carefully their role in student learning; the literature points very much to a facilitation rather than transmission role, that is, an approach which places the teacher/trainer alongside students so as to help them (the students) build a bridge with the content and objectives of the course.[12]

At the end of the day, the quality of delivery will have more impact on student learning than the format used for declaring objectives and performance criteria; six years of systematic use of student evaluations at VUW testifies to this. Again the implications for both the NZQA and universities are clear; emphasis must be placed on ensuring that those designing and delivering vocational and general educational programmes have the appropriate skills for this work as well as an understanding of the literature on student learning.

9. Final comment on the NZQA unit standard model

In several respects the unit standard model followed by the NZQA resembles closely the behaviourist method of specifying objectives as developed by Mager (1968)[13]; this is a point also argued by Viskovic (see note 6). Under Mager's method, a behavioural objective is expected to identify a learning outcome, the conditions under which the outcome is to be demonstrated, and the criteria against which performance will be judged as meeting the objective. These three components are closely modelled in the NZQA unit standard requirements by 'elements', 'range' and 'performance criteria'. The writer accepts that it is not the intent of the NZQA to encourage a behaviourist approach to course design, however, by starting with a Mager-style perspective on behavioural objectives, the NZQA in fact makes it difficult for providers to follow a course design model which is not reductionist in approach. Most of the problems and

misconceptions that have been highlighted in this section stem from the NZQA's starting point. If the NZQA is to achieve its aim of encouraging providers of general and professional educational programmes to develop integrated approaches to course design, teaching, learning and assessment, it should first address the rigidity of its own initial requirements.

Further obstactles to the integration of university qualifications into the NZQA Framework

1. The structure of the Framework

Before more pressure is mounted on the universities to integrate their qualifications into the NZQA Framework, considerably more attention should be paid to the structural obstacles that the Framework in its present form imposes. One obstacle has already been identified – the model of unit registration adopted by the NZQA. An equally significant problem exists in relation to the compatability of the eight level Framework with the organisation and progression of university qualifications.

Broadly speaking, university qualifications are registered by the NZVCC at four levels – bachelors, honours, masters and doctorate. Other qualifications, such as diplomas and certificates, are related to this structure according to their purpose and composition. While recent NZQA documentation indicates broad parallels between the levels of the Framework and university bachelor programmes (see Figure 1), all postgraduate programmes are registered on the Framework at level 8. Clearly this is totally inadequate for dealing with the different levels and progression that exist within and between such programmes. In its present form, the Framework is far too coarse for dealing with the detail and complexity of most university qualifications.

2. Credit transfer and the recognition of prior learning

A further problem concerns the notions of 'transfer' and the 'recognition of prior learning'. The concept of 'transfer' has two main interpretations, which although related, are often confused. In one sense, transfer refers to the ease with which students are able to move from one qualification to another, or from one institution to another, gaining full recognition for relevant credits already achieved. The second interpretation is more deeply embedded in the literature on human learning and refers to the extent to which particular knowledge, skills and attitudes are transferable across different learning contexts. On these matters, the universities and NZQA have somewhat differing viewpoints.

In relation to the first interpretation, the NZQA quite reasonably wishes to pursue the means by which students can move easily between institutions

or re-direct their study to meet their changing personal and professional needs. Similarly, the NZQA wishes to recognise the relevant work or life experience of students where that experience is seen as equivalent to – or at least as important as – formal educational achievements. Developing mechanisms for credit transfer and the recognition of prior learning (RPL) is consistent with the philosophy of the Framework and the responsibilities placed on the NZQA through the Education Amendment Act. The registration of unit standards is thus an integral part of the flexibility that NZQA hopes to create through the Framework; if particular units are able to be drawn upon for different qualifications, or able to be delivered in different institutions, then students are better able to achieve the mobility that NZQA wants to encourage. Similarly, participation in higher education and professional training is likely to be encouraged by systems which give appropriate recognition to prior work and life experiences. However, as mentioned earlier in this paper, credit transfer and RPL systems should be developed to fit the education that is provided, not the other way round.

The universities have, of course, operated their own systems for credit transfer and the recognition of prior learning although their approach has been somewhat more conservative than that now being advocated by NZQA. For example, it is possible for a student at a New Zealand university to enrol in a BA and virtually complete the requirements for a BSc in the process (e.g. by choosing subjects such as mathematics, psychology and geography). However, universities generally do not allow the transfer of more than a third of a degree to another qualification unless the second qualification is an advancement or extension of the first; students are expected to complete a significant amount of further study in order to be entitled to an additional major qualification. Under the NZQA scheme, however, students would only need to top up the minimum to achieve a second qualification – all previously obtained relevant credits would be transferred.

Clearly there are arguments in favour of both the NZQA's and universities' standpoints. As mentioned, the NZQA is trying to encourage access to further and higher education to enable people to upgrade their skills or change directions to meet their professional needs. Flexible transfer and recognition systems are incentives for this. On the other hand, the universities quite legitimately do not want to see their qualifications threatened by such systems if they devalue the effort and personal achievement normally expected of the titles 'BA', 'BSc', etc. There is no simple answer to this dilemma. The universities and NZQA have been debating for a long time a range of issues to do with credit transfer and the recognition of prior learning, and dialogue is still continuing. At the same time, the universities both individually and collectively have been reviewing their policies and procedures on both matters. A greater uniformity between the universities would be a useful outcome of this reflection. Ultimately, however, the NZQA and

universities will need to balance several (often competing) concerns – ease of mobility, pedagogical principles, comparability between university and non-university qualifications, and international credibility – if they are to achieve harmonious policies and practices on each matter.

3. The transferability of generic skills and attitudes

While the first interpretation of transfer is problematic for the universities and NZQA, the second raises complexities which have dogged learning theorists for a very long time. The NZQA, in its attempts to facilitate mobility through the operation of the Framework, is currently encouraging research into the notion of transferable 'generic' skills and competencies, that is, the identification and fostering of skills and competencies which are directly transferable to a wide range of learning contexts. However, if the educational literature so far is anything to go by, NZQA can expect only a moderate return for its efforts. The following points summarise what the writer sees as the key points affecting university education:[14]

- Confusion and inconsistencies exist in the use of terminology; 'generic' skills refer here to the higher order mental operations that can be considered to be relevant to a range of subjects and disciplines in higher education. Such skills tend to be 'cognitive' in nature and include thinking, reasoning, critical analysis, problem solving, research (in its various forms and approaches), communication and (possibly) aspects of numeracy. Note that the terms 'generic' and 'transferable' are not used here synonymously (see below).

- Generic skills, although identifiable across a wide range of disciplines, cannot be developed independently of context. Thinking, reasoning, problem solving, etc. can only develop through study of a body or domain of knowledge. In this respect, each discipline has its own particular knowledge structures and language, and each draws upon a particular range of methodologies for research; the methods used in English, for example, are not the same as those used in history, anthropology or mathematics, although there may be overlap between different subjects.

- Because generic skills are developed within disciplinary or subject contexts, their *form* is dependent on these contexts. Problem solving in economics, for example, is quite different from problem solving in sociology; the content, methods and style of communicating information, ideas and arguments in history are quite different from those in education, psychology or statistics. Even subjects which draw upon a similar mode of communication (e.g. essay writing) differ in their expectations of the form and conventions that such communication should take or follow. This is why learning support

programmes in universities which teach the skills and techniques of essay writing in a cross-disciplinary mode are generally much less successful than programmes which are contextually based.[15]

- Convincing evidence that generic skills are directly transferable across widely different contexts is lacking; the supportive evidence that does exist generally relates to situations which have limited educational relevance or value. For transfer to occur readily, contextual similarities (e.g. similarities in the knowledge base) must be present; thus a student with a strong background in statistics is likely to learn quite quickly a range of analytical techniques in marketing and finance because concepts such as 'central tendency', 'variance' and 'correlation' are the same in different subjects. A critical factor is the ability of the student to recognise the contextual similarities between what has already been learned and the requirements or conditions that relate to new tasks which have to be tackled. By the same token, university teachers can facilitate transfer by drawing attention to parallels between new and old content and by promoting student awareness of the need to look for such parallels. The following extract from Clanchy and Ballard (1993) summarises this point:

  > ...the *forms* of thinking, research and communication by which these generic skills [thinking, research and communication]* are developed and expressed can vary significantly between contexts. This helps to account for the sometimes markedly different levels of performance by the same student across a range of subjects on which he or she is apparently expending the same amount of effort. It also accounts for the commonly perceived delay in the transfer of skills from the context of higher education to that of employment. In general it is not the case that graduates lack the generic skills required by the workplace. Rather it is the case that graduates need to learn new forms that are appropriate to the specific context of employment – particularly specialised forms of communication – so that the generic skills in thinking and research acquired at university can now be expressed in ways that the employer recognizes as 'literate' or 'effective'. (p 10) (* Inserted by the writer.)

- Certain attitudes can also be thought of as generic in the sense that they are an integral component of the teaching and learning in most university subjects. For example, respect for ownership of knowledge, willingness to reflect on the validity of an argument before concluding a view, and willingness to read and research beyond the strict requirements of a task are important components of the teaching, learning and assessment of most university subjects. Caution is needed, however, in distinguishing these attitudes from what might be described as desirable 'secondary' outcomes of a university education which are not directly testable or observable except superficially or in specialised contexts. These include, for example, the demonstration of 'tolerance for other viewpoints', 'integrity', 'anti-racist attitudes', 'leadership' and 'self-confidence'. As mentioned, such outcomes are not 'generic' in that they are not readily contextualised to a range of subjects or disciplines and/or are not easily taught or directly assessed

outside of certain specific areas. This does not diminish their importance, but perhaps serves a warning to universities not to overstretch their credibility by constructing graduate profiles which, clearly, most graduates cannot be certified on available evidence as meeting.[16]

- Lastly, the distinction is made here between 'generic skills' and 'competencies' in that the former refer to higher order mental operations (thinking, problem solving, etc.) while the latter relate to skills of a more specific and/or technical nature.[17] Thus locating a book in a library or operating a calculator are classified here as 'competencies' rather than generic skills even though such competencies may, during the learning phase, involve thinking, problem solving, and so on. While some competencies are likely to be transferable to different contexts (e.g. the two examples just given) others are more likely to be vocationally or subject specific (e.g. trimming hair, operating a chain saw, or grouping biological specimens by their taxonomic classification).

In respect of the aim of the NZQA to foster research into the transferability of generic skills and competencies, several thoughts occur to the writer which both offer encouragement and serve as a cautionary note to this work.

First, it is clear that all involved organisations (universities, polytechnics, NZQA, etc.) will benefit from a greater understanding of the factors which encourage the transfer of generic skills and competencies. This first requires that teachers recognise and provide the conditions that foster the development of thinking, reasoning, analysis, problem solving and research in their own subjects. It also requires that students be encouraged to explore and adapt to the different forms that such skills take in the various disciplines they encounter; students need to be active in seeking contextual cues and similarities between what they know already and the situations that currently face them. Research which identifies for teachers the particular roles or strategies that they can employ in fostering such adaptation should be strongly promoted.[18]

Second, continued encouragement should be offered to different industry and professional groups to search for the common (similar in form) elements in the professional training of their employees. If common professional competencies are able to be identified in different unit standards, the potential for transfer (both interpretations) is clearly increased.

However, the NZQA should guard against the development and registration of unit standards – or, more specifically, the specification of elements and performance criteria – which are considered context free or knowledge independent. Even though it is quite possible, by choosing

language at an appropriate level of generality, to write common elements and performance criteria for unit standards in two different contexts (e.g. a unit standard in textile design and a unit standard in software development), the assumption should not be made that one unit standard is a substitute (a basis for credit transfer) for the other. As argued above, unless the form of the skills and competencies developed in each unit are the same, direct transfer of these skills from one context to the other is most unlikely. On this point, educators should heed the warning of recent research in Australia which shows better than average performance for TAFE students who transfer into the university system except in courses where the TAFE students had been exempted from prerequisite papers. The students concerned lacked important knowledge and skills needed for progressing smoothly into more advanced study.[19]

My final comment, although concerning the Framework, applies to all organisations, including universities, involved in developing and implementing educational policy. If research is to be truly of value it must be clearly directed towards informing policy, not simply supporting policy that is going to be introduced anyway. Senior administrators need to clearly distinguish between decisions and actions which are derived in different ways – from a value base, from argument and reason, from practical and financial considerations, and from systematic research. The last of these, systematic research, often has the effect of questioning, if not contradicting, decisions based on one or more of the other three. I would suggest, as a cautionary comment, that the research to date on the transfer of generic skills falls into this category: it certainly places limits or constraints on policies that would enable a more open approach to be taken to credit transfer and the recognition of prior learning; it also does not help the NZQA identify ways of keeping the scale and size of the Framework under manageable control (e.g. by merging unit standards or developing context free elements and performance criteria); and, for educational providers, it reinforces the need for significantly more resources (a financial problem) to be assigned to the professional development of their teachers so that they can be both researchers and teachers of their subject (see 'First' above).

4. Keeping the Framework under manageable control: an extended structure

As noted earlier, the Education Amendment Act (1990) requires the NZQA to develop a framework for registering and relating secondary and post-secondary qualifications in a way that "students and the public can understand" and gives recognition to "competency already achieved". From a narrow vocational perspective, the Framework so far appears to be achieving its stated intent (albeit at greater cost than forecast) although doubts must exist as to the scale of the activity and the resources that will be needed to register unit standards for all senior secondary, vocational

and other tertiary qualifications. On this point, it should be noted that a rapid expansion is expected over the next year or two in the number of unit standards to be registered; approximately 1000 have been registered to date, and a further 6000 (some estimates go as high as 10,000) are expected to be included over the next 12-24 months.[20] If one adds the cost and effort needed to develop, implement and monitor the associated policies for quality assurance, credit transfer, the recognition of prior learning, and the recording of student performance, the task seems more than daunting. Quite sensibly, the NZQA is working closely with the various participants in education and training (Industry Training Organisations, educational providers, etc.) with a view to progressively decentralising, as appropriate, more of the work to these organisations and groups. This in itself has required the development and operation of effective communication systems which are both time-consuming and resource heavy. Participating organisations are already raising questions about the devolved costs of operating the Framework.

Potentially, the NZQA is in danger of overstretching its resources and capabilities by creating a structure that it will find increasingly more difficult to maintain. In the process, the NZQA will sorely test the goodwill of a number of educational bodies and providers because of the requirements, including workload and cost, it places on them to conform to procedures which are not always perceived as practical or educationally appropriate. The potential for bureaucracy, rather than careful educational development, is enormous. The message for the NZQA is clear: proceed slowly and carefully in expanding the scope and operation of the Framework, and be willing to recognise perspectives on standards, course development, transfer (both interpretations), quality assurance and other matters which are not necessarily its own.

It should be made clear that the preceding comments are directed, not towards the operation of the Framework for certain kinds of vocational education (i.e. at the training end of the learning spectrum), but rather the extension of the same modus operandi into university education (both general and vocational). In this respect, the relationship of the NZQA with the universities could be simplified by recognising that the universities' own approval structure is no less a *framework* for co-ordinating qualifications and courses than the NZQA structure. For example, an inspection of the universities' Calendars for 1993 indicates that the total number of qualifications available across the system exceeds 500; the number of individual courses and papers supporting these qualifications is close to 9,000. As mentioned earlier, the NZVCC (through CUAP) approves the offering of new programmes in universities; it oversees the regulations on the criteria that must be met if new programmes are to be mounted. In turn, each university is required to operate its own assurance systems to check the quality of the content and delivery of individual courses and papers; such systems include the use of external examiners, periodic departmental reviews involving both NZ and overseas panel

members and regular evaluation of teaching. The universities' *qualifications framework* has developed over a long period; its quality systems, although currently under review, have been accepted so far as being appropriate for establishing and maintaining comparability between universities in their standards. The system is also internationally comparable in that New Zealand degrees are, for the most part, internationally recognised. The work of the new Universities' Academic Audit Unit should strengthen these and other aspects of the quality systems operating both within and across universities.

The way forward for the universities, other educational providers and NZQA seems obvious. Rather than trying to merge one framework into the other, an **extended structure** should be formally recognised which would allow the universities to continue to develop programmes free of the unit standard methodology but would require the integration of **qualifications** (not unit standards) from different providers into a coherent system. Under the extended structure, the focus would be on the standard of the total programme (qualification), not on the components/units making up the programme; their quality would be assured through clearly developed in-house quality assurance procedures.[21]

The point that needs to be made here is that the current Framework is not capable of delivering the requirements of the Education Amendment Act; the framework for doing this has yet to be devised. Under the notion of an extended structure, the present (unit standard) Framework would remain in place for any National Standards Body or Industry Training Organisation which opts for the unit standard model of development. For other organisations, including degree providers outside of universities (e.g. polytechnics), the extended structure would provide a more flexible and pedagogically relevant approach to standards setting and course development. Some guiding principles would need to be identified to govern the development of the extended framework structure. These would need to cover:

- The recognition of the need to allow diversity in programme and course design, including delivery and assessment;
- The establishment of a system to ensure equivalence in status between university and non-university qualifications at a comparable level;
- The development of systems for facilitating credit transfer and the recognition of prior learning both between and within the different contributing educational bodies;
- The development of a 'format' for registering qualifications, supported by the development of quality assurance systems to assure the quality of the education provided by the different contributors.

In respect of the last point certain items should be addressed in the development of a format. These include:

- A statement of the overall purpose and objectives of a programme being offered for a particular qualification. Such a statement would give students, employers and other interested groups a general idea of what a graduate should be able to do as a result of their study. While such objectives would need to be regularly reviewed to enable a programme to remain current, this would be a much smaller operation than that needed to regularly update the large number of unit standards currently being registered under the existing Famework.

- A statement of the structure of a programme, including the list of papers comprising the programme and their sequence or progression. Each paper or course in a programme should include a clear purpose statement to indicate its place in the programme.

- Quality assurance procedures which address the criteria currently agreed upon by the NZVCC and NZQA (see page 5).

The components of course design for university papers

As mentioned earlier, procedures for the approval of university programmes are well described in a recently published NZVCC booklet. This section supplements the NZVCC information by listing in diagramatic form (Figure 3) the key components of course design which, if followed, would enable academics to fulfil both CUAP and their own institutional requirements. While most of what is shown is generally claimed to be standard practice in universities, a small number of academics still challenge the value of specifying objectives, arguing that information about course requirements and assessment is usually clear enough without them. However, there is no doubt that research on learning generally supports the use of objectives and that students typically respond favourably to information presented in this form. Significantly, most academics now accept that by writing objectives they are providing a focus for student learning. The NZVCC also appears to have accepted their value as evidenced in the programme and course approval criteria listed earlier.

Another reason for identifying the key components of course design is that it indicates clearly where universities stand in relation to the NZQA unit standard requirements. By making explicit their position, universities are in a stronger position to defend their practices against ill-informed criticism. Information of the kind presented here also provides a basis for both developing and reviewing systems for monitoring the quality of what is provided.

CALENDAR ENTRY: (Registered with CUAP)	Unit/course title and code Qualification (the programme(s) to which the paper relates) Level and credit rating Purpose statement Entry information (pre-requisite, co-requisities, exclusions)
OBJECTIVES:	The major learning outcomes and process objectives that students should achieve or undertake. Objectives should be written from the perpsective of students (e.g. 'students should be able to...') because it is the students who have to do the achieving. The focus of the course should be encapsulated in about 3-7 carefully worded statements.
CONTENT & SEQUENCE	The major topics, skills, themes, issues etc. that the course will cover including the order of coverage.
ASSESSMENT FRAMEWORK & PERFORMANCE CRITERIA	The assessment rules that apply to the course including the type of tasks to be undertaken (essays, reports, projects, exams, etc.), their respective weightings, due dates and other details. Grade criteria for the course should be stated including the requirements for a pass. Performance criteria should be given out with assignment topics/questions.
TEACHING-LEARNING DESIGN	The design of the teaching-learning environment. This should cover development of appropriate teaching strategies (e.g. problem-based, seminar directed, open learning) and decisions on how lectures, laboratories, etc. will be used to best effect. Lesson plans (including lecture preparation) may be developed either before the course starts or as an ongoing process during the course. Consideration should be given to the learning support (e.g. bridging, CAL, peer group tutoring) that will be needed to assist students and foster a positive learning climate.
RESOURCES & MEDIA	The development or acquisition of teaching and learning resources to support the course; the selection of media and the training of staff in their use; the purchase and hiring of equipment; the provision of library and similar resources; identification of the human resources needed to support the course including the selection, employment and training of part-time staff; the availability of rooms and other spaces for teaching and learning; the financial implications of all of the above; consideration of the constraints that limit the scope of what can be provided.
COURSE TIMETABLE	The timetable for the course including key dates for the submission and return of student work.
COURSE OUTLINE	The preparation of a course outline giving students all esssential details of the objectives, content, assessment, timetable and other matters relating to the course. Important administrative information should be included concerning office hours, rooms, services and departmental regulations.
COURSE MANAGEMENT	The design and development of systems for co-ordinating all facets of the course: administration, planning, teaching, assessment, evaluation, communications, record keeping, quality control, and other as needed.
EVALUATION & REVIEW	The development of an evaluation and course review plan covering course content, teaching, student learning, assessment and other key components.

Figure 3: The key components of course design for university courses

Figure 3 depicts the key components in the design of individual courses as followed in course design workshops at VUW. The information provided relates essentially to face-to-face (as opposed to distance) education courses, however, most of what is provided could be readily adapted to the distance mode. Note that Figure 3 does not constrain course designers to a particular model of teaching and learning; it merely sets out the components of what should be considered in course development. Teachers are able to adapt what is provided to a particular model or mix of models to suit their own context and teaching approach (e.g. open learning, problem-based learning or conventional lecture delivery). Similarly, assessment procedures are not constrained by the premature development of performance criteria – criteria are associated with the assessment framework, not the objectives.

Conclusion

The purpose of this paper has been to consider some of the obstacles to the integration of university qualifications and courses into the National Qualifications Framework. From the perspective of university education, the critical problem areas identified here include:

- the behaviourist/reductionist composition of unit standards and their implications for course design;
- the separation of unit standards from the course design process;
- the association of performance criteria with course elements rather than with the assessment tasks that students undertake;
- the inflexibility and primacy of unit standards;
- the workload implications for university staff if they were to adopt the NZQA model;
- the coarseness of the Framework for integrating (in particular) post-graduate university programmes;
- apparent different philosophies between NZQA and the universities on credit transfer and the transfer of generic skills; and
- the vast effort and resources that would be needed to maintain and operate a Framework incorporating senior secondary, vocational and university qualifications.

The resolution of all of these problems is very unlikely, but through continuing dialogue and willingness to listen, the universities and NZQA are likely to reach agreement on some of these matters (e.g. credit transfer). The overall problem, however, is that the concept of a single qualifications structure along the lines of the present Framework is simply unworkable given the diversity of purpose and composition of different educational programmes. The current unit standard approach is not sufficiently robust to recognise such diversity.

Possibly the current structure is fostered by the Government's vision of *seamlessness*, that is, that learners can move easily between institutions and different programmes and that students can undertake the same study in different ways to suit their context. In practice, seamlessness is very much about ease and diversity of access to education – a laudable intention which is already embodied in agreements where one institution offers a programme or individual courses developed by another. However, seamlessness should not depend on uniformity in unit definition (and consequently course design); if diversity in access translates into uniformity in educational approach, then the costs to higher education will far outweigh the benefits that seamlessness might provide.

That the Framework is problematic for traditional university education has been argued by a number of writers. The suggestion in this paper of an extended framework structure to take advantage of the well established system of programme and course approvals operated by universities should be given serious consideration. Such a structure would free NZQA, the universities and other educational providers to pursue models of course development and approval without compromising the purpose and nature of each other's activities. In order to meet the legislative obligations of the Education Amendment Act, efforts can then be concentrated on the interface between the different contributors (quality assurance, credit transfer, qualification equivalence, etc.) rather than on the monumental task of trying to merge all educational programmes into one method of development. It is hard to believe, given the current level of educational funding, that the latter direction is a serious option.

Notes and references

1. This is a modification of the diagram given in: *The Framework and Universities.* NZQA, Wellington, 1991, p 5. The diagram takes account of developments in thinking given in: *Draft Document: Quality Assurance for Degree and Related Qualifications,* NZQA, Wellington, December, 1993, Appendix 1, p 30.

2. As identified from an inspection of several recently published unit standards.

3. See: *Guidelines and Criteria for Accreditation to offer National Certificates and National Diplomas,* NZQA, Wellington, 1992, pp 11-12.

4. Committee on University Academic Programmes. *Course Approval and Accreditation Procedures.* New Zealand Vice-Chancellors' Committee, 1993, p 4.

5. Hall, C. 'Questions about Quality: Focusing on Course Design and the Teaching-Learning Environment'. In *Quality Assurance in New Zealand Universities: Workshop File,* New Zealand Vice-Chancellors' Committee, 1992, pp 4-5.

6. A recent critque of the NZQA Framework by Viskovic deals with the limitations of using behavioural objectives in general educational contexts. See: Viskovic, A.R. 'Learning and Competence: A Critque of NZQA's Perspective as Evidenced by the Unit Standards Requirements'. In Parer, M. (ed) *Research and Development in Higher Education,* HERDSA, Vol 15, pp 334-341.

7. Purvis, B. *Standards-Based Assessment in the University: A Case Study.* New Zealand Qualifications Authority, Wellington, 1993.

8. The following papers give different perspectives on the assessment of competence as a model for higher education:

   Hager, P. and Gonczi, A. *General Issues About Assessment of Competence.* University of Technology, Sydney, 1992.

   Pennington, D. *The Competency Crusade and Education: Meeting Society's Needs.* Address to the Manufacturing Outlook Conference, Australian Vice-Chancellors' Committee, September 1992.

   Baldwin, G. *The Relevance of Competency-based Approaches to University Education,* Higher Education Advisory and Research Unit, Monash University, 1993.

   In addition, the following annotated bibliography summarises a number of papers concerned with competency and, to some extent, the transferability of generic skills and competencies:

   Marginson, S. and O'Hanlon, S. *From the generalist courses to work: an annotated bibliography on generic skills.* University of Melbourne, CSHE Research Working Papers 93.5, 1993.

9. The following paper briefly describes three models of competency-based assessment:

   Hager, P. 'How Convincing are the Arguments Against Competency Standards?' In Hall, W.C. (ed.)*What Future for Technical and Vocational Education and Training?* National Centre for Vocational Education Research, Adelaide, 1993, pp 145-64.

10. Hall, C and Klijn, F. *Academic Staff Perceptions of the Meaning of Competence and Excellence.* University Teaching Development Centre, Victoria University of Wellington (in preparation). This research asked VUW academic staff to place their conception of a 'competent performance' on a four point scale, namely: (1) Excellent, (2) Very good, (3) Good, and (4) Satisfactory. Approximately 73% of the respondents identified (3) and/or (4) as their conception of 'competence'; only one respondent identified (1) although four respondents circled both 1 and 2. (N = 193 overall; 420 staff were surveyed, but approximately 60 were absent on study/conference leave, giving a response rate of approximately 54%.)

11. Ibid. 69% of the sample identified 'originality' as a key element in excellent work and 42% identified performance well beyond the expected level of the class as an element of excellent work.

12. The following texts provide a discussion of the literature linking teaching and learning:

    Entwistle, E. *The Impact of Teaching on Learning Outcomes in Higher Education: A Literature Review.* Universities' Staff Development Unit, Committee of Vice-Chancellors and Principals, Sheffield, 1992.

    Ramsden, P. *Learning to Teach in Higher Education.* Routledge, 1992.

13. Mager, R. *Preparing Instructional Objectives.* Fearon, California, 1968.

14. This sub-section draws upon, in particular, the views of: Clanchy, J. and Ballard, B. *Generic Skills in the Context of Higher Education,* Australian National University, Study Skills Centre, January, 1993.

15. A wide range of papers and texts have been published which, in one way or another support strongly the notion that the development of writing skills is contextually dependent. For example, see:

    Freedman, A. 'Learning to Write Again: Discipline-Specific Writing at University', *Carleton Papers in Applied Language Studies,* 4, 1987, pp 95-115.

    Nightingale, P. 'Understanding Processes and Problems in Student Writing', Studies in Higher Education, 13, 1988, pp 263-283.

    Taylor, G. et al. *Literacy by Degrees,* Milton Keynes: SRHE and OUP, 1988.

16. This point is well argued by Clanchy and Ballard, pp 3-7. These writers also exclude 'ethical practice' as a generic attitude; this is less arguable given the growth in codes of practices in a range of professional and research settings. However, it is doubtful whether universities can assess much more than knowledge of such codes – demonstration of ethical practice through actual behaviour is a long term effort and more suited to certification from professional bodies than universities.

17. This is an incomplete definition of 'competency' reflecting the writer's own difficulty in identifying an interpretation which gives clear insight into the nature of 'competence'; the examples given in the text help distinguish between the characteristics of generic skills and competencies. The literature is not very helpful because of confusion in the use of terminology. An operational definition of competence is given by NZQA: "The application of knowledge, skills and attitudes to the standard required." (*Essential Skills and Generic Skills in the National*

Qualifications Framework, NZQA, November 1993, p 30); this definition is also unhelpful for giving insight into the nature of competence.

18. In recent years a good deal of effort has been invested overseas in promoting the notion of transferability. The 'enterprise' programme in Britain is an example. Of particular interest is the work of Stephenson and Weil on educating for 'capability'. However, much of what they conclude is an integration of many long-established principles and findings on human learning (e.g. building on previous knowledge, encouraging active and interactive learning, identifying student and teacher expectations, encouraging self-assessment, etc.). See, for example, Stephenson, J. and Weil, S. *Quality in Learning: A Capability Approach to Higher Education*, Kogan Page, London, 1992.

19. Survey by Burns, B and Davey, B. of the Faculty of Business, Royal Melbourne Institute of Technology, and reported in *Campus Review: Higher Education News*, Vol 3, No 22, June 17-23, 1993, p 6.

20. Personal communication with the NZQA, January 1994.

21. The concept of an 'extended' framework structure is a development of a 'dual' structure proposed by the writer in an earlier draft. The essential difference is that the dual structure focused only on the interface between the current Framework and the universities' system for approving programmes. The 'extended' structure recognises the concerns of other educational groups (e.g. polytechnics) and the need for them to also develop programmes without the constraining effects of the unit standard methodology.